

MICROPROCESSOR INCLUDING CONTROLLER FOR REDUCED POWER CONSUMPTION AND METHOD THEREFOR

ABSTRACT OF THE DISCLOSURE

5 A microprocessor, method and signal-bearing medium for storing a program for executing the method, includes a microcode unit for outputting control signals, for each of a plurality of instructions, required by the microprocessor for executing the instructions. The microcode unit includes an instruction address input for receiving an instruction address, a control variable input for receiving a control variable corresponding to a current state of the microprocessor, a control signal input for receiving all of the control signals output by the microcode unit for an immediately preceding instruction, and a plurality of embedded logic circuits each dedicated for evaluating one unique type of instruction received by the microcode unit.

10 variable input for receiving a control variable corresponding to a current state of the microprocessor, a control signal input for receiving all of the control signals output by the microcode unit for an immediately preceding instruction, and a plurality of embedded logic circuits each dedicated for evaluating one unique type of instruction received by the microcode unit.